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DOCTORAL DISSERTATIONS ON THE MANAGEMENT AND ECOLOGY OF FISHERIES
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SPECIAL SCIENTIFIC REPORT: FISHERIES No. 87

UNITED STATES DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE

Explanatory Note

The series embodies results of investigations, usually of restricted scope, intended to aid or direct management or utilization practices and as guides for administrative or legislative action. It is issued in limited quantities for the official use of Federal, State or cooperating agencies and in processed form for economy and to avoid delay in publication.

Washington, D. C.
October 1952

United States Department of the Interior, Oscar L. Chapman, Secretary
Fish and Wildlife Service, Albert M. Day, Director

Special Scientific Report: Fisheries No. 87

DOCTORAL DISSERTATIONS ON THE MANAGEMENT AND ECOLOGY OF FISHERIES

Additional Listing

Prepared in the Branch of Fishery Biology

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INTRODUCTION

This is a revision of the Special Scientific Report: Fisheries No. 31. This list is composed of titles of doctoral theses written between 1934 and the 1950-1951 school year, on subjects related to the ecology and management of fisheries. Many theses are never published; therefore, the material contained therein is not available to fishery workers. All theses are on file in the libraries of the institutions where they were accepted. Interlibrary loans can be arranged with almost all of these institutions. All titles have been taken from "Doctoral Dissertations Accepted by American Universities, 1933-1934" to "...1950-1951" (The H. W. Wilson Co., New York). Titles on wildlife have been published in Wildlife Review, No. 59, February 1950, U. S. Fish and Wildlife Service, Neil Hotchkiss, Editor.

The list is reasonably complete for doctors' theses through 1950. It is incomplete for doctors' theses in 1951 and contains no masters' theses. Lack of published lists, our failure to examine some published lists, and our failure to secure solicited information account for this incompleteness. Information regarding omissions and errors, and institutions, theses, and publications, not included, is solicited.

Compiled by W. F. Carbine
Branch of Fishery Biology

CRUSTACEA

(See also POPULATION, Slobodkin)

BANNER, Albert Henry. The Crustacea of the orders Mysidacea and Euphausiacea of the Northeastern Pacific. PhD, Washington, 1944.

BODEN, Brian P. The crustaceans of the order Euphausiacea from the temperate north-east Pacific, with notes on their biology. PhD, California, Los Angeles, 1950.

BOVBJERG, Richard V. The ecological distribution of crayfish related to certain tolerances. PhD, Chicago, 1950.

BROCKMAN, John A., Jr. Studies on Dichroa febrifuga. A method for estimating chloride. Studies on Cambarus clarkii. PhD, California Tech., 1948.

BUSCH, Karl Henry. Embryology of the crayfish, Cambarus rusticus, Girard. PhD, Ohio, 1941.

CARL, George C. The distribution of Cladocera and free-living Copepoda in British Columbia with special reference to the Centropagidae. PhD, Toronto, 1937.

CLEMENS, Howard P. Life cycle and ecology of Gammarus fasciatus Say. PhD, Ohio, 1950.

CORRIVAULT, Georges W. Contribution a l'etude de la biologie du homard des eaux de la province de Quebec. PhD, Laval, 1948.

CRONIN, Lewis E. The anatomy of the male reproductive system of the blue crab, Callinectes sapidus Rathbun. PhD, Maryland, 1946.

DAVIS, Charles Carroll. The pelagic Copepoda of the northeastern Pacific Ocean. PhD, Washington, 1940.

EDWARDS, George A. The influence of eyestalk removal on the metabolism of the fiddler crab. PhD, Harvard, 1948.

EDWARDS, Richard. Yorktown and Duplin Ostracoda of North Carolina and Virginia. PhD, North Carolina, 1938.

GOELLNER, Karl Eugene. The life cycle and productivity of the crayfish, Cambarus immunis Hagen. PhD, Michigan, 1943.

GOODNIGHT, Clarence J. A monograph of the Branchiobdellidae (Oligochaeta) of the American crayfishes. PhD, Illinois, 1939.

GRAVE, Caswell, II. The lipides in lobster nerve. PhD, Washington, St. Louis, 1941.

CRUSTACEA - Continued

HART, Josephine F. L. The larval and adult phases of certain hermit crabs (Anomura) of British Columbia, with special reference to characters significant in a study of their inter-relationships. PhD, Toronto, 1937.

HASLER, Arthur D. The physiology of digestion in plankton Crustacea. PhD, Wisconsin, 1937.

HEATH, James Procter. The nervous system of the kelp crab: Pugettia producta. PhD, Stanford, 1941.

HIATT, Robert Worth. The biology of a grapsoid crab, Pachygrapsus crassipes Randall. PhD, California, 1942.

HOBBS, Horton H. A contribution toward a knowledge of the crayfishes of Florida with special reference to their ecological and geographical distribution. PhD, Florida, 1940.

HOFF, Clarence C. A contribution to the biology and taxonomy of the ostracods of Illinois. PhD, Illinois, 1941.

JONES, Lowell L. Osmotic regulation in several Pacific Coast crabs and its relation to environmental factors. PhD, California, 1939.

LANGFORD, Raymond R. The distribution and utilization of the limnetic crustacea of Lake Nipissing, Ontario. PhD, Toronto, 1936.

LYLE, Clay. The crawfishes of Mississippi, with special reference to the biology and control of destructive species. PhD, Iowa State, 1938.

MACKAY, Donald C. G. The growth and life history of the Pacific edible crab. PhD, Stanford, 1934.

MOORE, James E. The Entomostraca of southern Saskatchewan. PhD, Toronto, 1950.

OLSON, John B. The pelagic cyclopoid copepods of the coastal waters of Oregon, California, and Lower California. PhD, California, Los Angeles, 1950.

ROBERTS, Tilden W. Light and certain endogenuous factors as regulators of community activity for the crayfish, Cambarus virilis Hagen. PhD, Illinois, 1942.

TACK, Peter I. The life history and ecology of the crayfish Cambarus immunis (Hagen). PhD, Cornell, 1939.

CRUSTACEA - Continued

TRAVIS, Dorothy F. Calcium metabolism in the decapod Crustacea. PhD, Radcliffe, 1951.

VAN DEVENTER, William C. Studies on the biology of the crayfish Cambarus propinquus, Girard. Abstract, Urbana, 9 p. PhD, Illinois, 1935.

WEBB, Helen M. Diurnal variations of response to light in the fiddler crab, Uca. PhD, Northwestern, 1950.

DEVELOPMENT

(See also LIFE HISTORY STUDIES, Eschmeyer, Johnston; PHYSIOLOGY, Aronowitz, Clark, Foster)

BAILEY, Sarah W. An experimental study of the origin of lateral-line structures in embryonic and adult teleosts. PhD, Radcliffe, 1936.

DILDINE, Glenn C. Germ cell origin and migration and gonad histogenesis in the ovoviviparous teleost, Lebistes reticulatus. PhD, Northwestern, 1934.

GRIMM, Wilbur W. The development of the fins of the goldfish (Carassius auratus). PhD, Ohio, 1937.

JONES, Roy W. Analysis of the development of fish embryos by means of the mitotic index. PhD, Oklahoma, 1937.

MANERY, Jeanne F. Ionic changes in developing teleost eggs. PhD, Toronto, 1935.

ROWLEY, Jean B. Discrimination limens of pattern and size in the goldfish Carassius auratus. Genetic psychology monographs, v. 15, no. 3, Mar. 1934. PhD, Columbia, 1935.

SCRIMSHAW, Nevin Stewart. Embryonic growth in viviparous cyprinodont fishes. PhD, Harvard, 1941.

SELF, John T. Analysis of the development of fish embryos by means of the mitotic index. PhD, Oklahoma, 1936.

TAVOLGA, William N. Embryonic development of the platyfish (Platypoecilus), the swordtail (Xiphophorus) and their hybrids. PhD, New York, 1949.

WARNER, Edward Nelson. Studies on the embryology and early life history of the gizzard shad, Dorosoma cepedianum, Le Sueur. PhD, Ohio, 1941.

DEVELOPMENT - Continued

WARREN, Althea A. Some observations on the capsular membrane of the unfertilized eggs of fishes. PhD, Toronto, 1950.

WILLIAMS, Lyle L. A comparative study of the development of the liver in teleost fishes with special reference to the relation between liver and yolk-periblast. PhD, North Carolina, 1939.

DISEASES AND PARASITES
(See also TAXONOMY, Kimpel; TECHNIQUES, Smith)

BAKER, James A. Turberculosis of fish. PhD, Cornell, 1939.

BENNINGTON, Elwin E. The life history of the salmon poisoning fluke, Troglotrema salmincola (Chapin). PhD, Oregon State, 1951.

BONHAM, Kelshaw. Some monogenetic trematodes of Puget Sound fishes. Published as Notes on Microcotyle sebatisgoto from Puget Sound. Jl. parasitology, 23:281-290, June 1937. PhD, Washington, 1937.

BORG, Alfred F. Studies on myxobacteria associated with diseases in salmonid fishes. PhD, Washington, 1949.

DEGIUSTI, Dominic Lawrence. The life cycle of Leptorthynchoides thecatus Linton an acanthocephalan of fish. PhD, Wisconsin, 1944.

DETURK, William Ernest. The parasites and commensals of some crabs of Beaufort, North Carolina. PhD, Duke, 1940.

ENGLESBERG, Ellis. A biochemical and genetic study of several mutants of Pseudomonas fluorescens. PhD, California, 1951.

GRIFFIN, Philip J. Some nutritional requirements of a new member of the genus Hemophilus (H. piscium). PhD, Yale, 1951.

GUNTHER, Francis A. Fish-killing principles of Euphorbiaceae species Croton californicus Mull. Arg. and Eremocarpus setigerus Benth. PhD, California, Los Angeles, 1947.

HADERLIE, Eugene C. Parasites of the fresh-water fishes of northern California. PhD, California, 1951.

HARDCASTLE, Aaron Bascom. The genus Eimeria, with special reference to the species parasitic in marine fishes. PhD, Duke, 1942.

HART, John F. Cestoda from fishes of Puget Sound. PhD, Washington, 1935.

KUPFERBERG, Alfred B. Streptocin, an antibiotic effective against Protozoa. PhD, Rutgers, 1951.

LLOYD, Lowell C. Some digenetic trematodes from Puget Sound fish. PhD, Washington, 1937.

LOWELL, Ralph D. Studies on the host-parasite relationships between a trematode Metacercaria (Posthodiplostomum sp.) and a fish host. PhD, Illinois, 1943.

MEYER, Marvin C. A revision of the leeches (Piscicolidae) living on fresh water fishes of North America. PhD, Illinois, 1939.

MIZELLE, John D. New species of trematodes from the gills of Illinois fishes. Univ. of Ill. Zoological laboratory contributions, no. 489. Published also in the American Midland Naturalist, 17: 785-806, Sept. 1936. PhD, Illinois, 1937.

MONSMA, Edwin Y. A study of the water molds of the Lydell State fish hatchery at Comstock Park, Michigan. PhD, Michigan State, 1936.

MOORE, Donald Vincent. Studies on the life history and development of certain Acanthocephala of the order Archiacanthocephala (Meyer, 1931). PhD, Rice, 1942.

NIGRELLI, Ross F. The morphology, cytology and life history of Oodinium ocellatum Brown, a dinoflagellate parasitic on marine fishes. PhD, New York, 1936.

OPPENHEIMER, Carl H. Some effects of hydrostatic pressure on marine bacteria. PhD, California, Los Angeles, 1951.

RAUSCH, Robert L. Studies on the parasitic helminths of the North Central States. PhD, Wisconsin, 1949.

RUCKER, Robert Raymond. A study of saprolegnia infections among fish. PhD, Washington, 1944.

SCOTT, David M. The life history and ecology of the cod-worm, Porrocaecum decipiens (Krabbe) 1878, in Canadian Atlantic waters. PhD, McGill, 1950.

SEITNER, Philip G. Observations on the life history of Allocreadium ictaluri Pearse, 1924. PhD, Purdue, 1951.

STEEN, Edwin B. Studies on the morphology, taxonomy, and life cycles of fish bladder flukes (Trematoda: Gorgoderidae). PhD, Purdue, 1938.

DISEASES AND PARASITES - Continued

TIDD, Wilbur M. Studies on the life history of a parasitic Copepod, Lernaea carassii Tidd. PhD, Ohio State, 1938.

TIFFNEY, Welsey N. A study of species of Saprolegnia attacking fish. PhD, Harvard, 1936.

WOODBURY, Lowell Angus. A quantitative study of parasites of fishes with special reference to Clinostomum marginatum in the perch of Walsh Lake, Michigan. PhD, Michigan, 1940.

ECOLOGY

(See also CRUSTACEA, Bovbjerg, Clemens; GAME FISH, Wilder; LIFE HISTORY STUDIES, Eschmeyer, Frey, Johnston, Koster, Odell; LIMNOLOGY, Ball; PHYSIOLOGY, Aronowitz, Clark, Foster; PLANKTON, Pierce)

ANDREWS, Harry L. An ecological study of living forms in the kelp beds of Monterey Bay and Carmel Bay, California. PhD, Illinois, 1938.

BARDACH, John E. Contribution to the ecology of the yellow perch (Perca flavescens Mitchill) in Lake Mendota, Wisconsin. PhD, Wisconsin, 1950.

BLAIR, Arthur A. Factors affecting growth of the scales of salmon (Salmo salar). PhD, Toronto, 1938.

COLE, Gerald A. An ecological study of the microbenthic fauna of two Minnesota Lakes. PhD, Minnesota, 1950.

DAVIES, Douglas M. The ecology and life history of blackflies (Simuliidae, Diptera) in Ontario with a description of a new species. PhD, Toronto, 1949.

DENDY, Jack Stiles. The fate of animals in stream drift when carried into lakes. PhD, Michigan, 1943.

DEXTER, Ralph W. The marine communities of a tidal inlet at Cape Anne, Massachusetts: a study in bioecology. PhD, Illinois, 1938.

DINEEN, Clarence F. An ecological study of a Minnesota pond. PhD, Michigan State, 1951.

DOAN, Kenneth Henry. Some meteorological and limnological conditions as factors in the abundance of certain fishes in Lake Erie. PhD, Ohio State, 1941.

ECOLOGY - Continued

DOUDOROFF, Peter. The resistence, reactions, and acclimatization of some marine fishes to changes of temperature. PhD, California, 1941.

ELSON, Paul F. Effects of current, temperature and light on the movements of speckled trout. PhD, Toronto, 1939.

FRENCH, John Winslow. The effect of temperature on the retention of a maze habit in fish. PhD, Princeton, 1942.

GRIBBLE, Lloyd R. Reactions of brook lampreys to various lights. PhD, West Virginia, 1935.

GUNTER, Gordon Pennington. Studies on marine fishes of Texas: relative abundance and cyclic behavior related to salinity and temperature. PhD, Texas, 1945.

HEWATT, Willis G. Ecological studies on selected marine intertidal communities of Monterey Bay. PhD, Stanford, 1935.

KERSWELL, Charles James. Some environmental factors limiting growth and distribution of the quahaug, Venus mercenaria L. PhD, Toronto, 1941.

LAGLER, Karl Frank. Ecological studies of turtles in Michigan with special reference to fish management. PhD, Michigan, 1940.

LINDEMAN, Raymond Laurel. Ecological dynamics in a senescent lake. PhD, Minnesota, 1941.

MCDOUGALL, Kenneth Dougal. Sessile invertebrates of Beaufort, North Carolina. A study of settlement, growth and seasonal fluctuations among pile-dwelling organisms. PhD, Duke, 1942.

MARSHALL, Nelson. A study of the life history and ecology of Notropis chalybaeus (Cope) supplemented with data on other cyprinids in Florida. PhD, Florida, 1941.

MARTIN, William R. The mechanics of environmental control of body form in fishes. PhD, Michigan, 1948.

METCALF, Isaac Stevens Halstead. The influence of a shore community on the destribution of certain fishes in Lake Erie with especial reference to the white bass. PhD, Western Reserve, 1940.

MOORE, George Azro. Studies on the adaptations of fishes to the silty waters of the great plains. PhD, Michigan, 1942.

MOORE, Walter Guy. Studies on the oxygen requirements of certain fresh-water fishes, with special reference to winter conditions. PhD, Minnesota, 1941.

PENNAK, Robert W. The ecology of the psammolittoral organisms of some Wisconsin lakes, with special reference to the Tardigrada, Copepoda, and Rotatoria. PhD, Wisconsin, 1938.

PERLMUTTER, Alfred. Variation of American North Atlantic marine fishes correlated with the environment. PhD, Michigan, 1941.

PRATT, Harold P. Ecology of the trout of the Gunnison River. PhD, Colorado, 1938.

REIF, Charles Braddock. A study of Minnesota stream communities. PhD, Minnesota, 1941.

RICKER, William E. Studies of the limnological factors affecting the propagation and survival of the sockeye salmon, Oncorhynchus nerka, at Cultus Lake, British Columbia. PhD, Toronto, 1936.

ROELOFS, Eugene Woodrow. Water soils in relation to lake productivity. PhD, Michigan State, 1941.

ROGERS, Harold M. The estuary as a biological habitat, with special reference to the smelt Osmerus mordax (Mitchill). PhD, Toronto, 1939.

SCOTT, Grace Winnifred Workman. Certain aspects of the behavior of frog tadpoles and fish with respect to temperature. PhD, Toronto, 1943.

SHAPIRO, Sidney. Geographic variation in Fundulus diaphanus, a Cyprinodontid fish. PhD, Michigan, 1947.

SMITH, George F. M. Some factors limiting the distribution and size of the starfish Asterias vulgaris (Verrill). PhD, Toronto, 1939.

SOLMAN, Victor Edward Frick. The ecological relations of waterfowl with special reference to predatory fish. PhD, Toronto, 1942.

STARRETT, William C. An ecological study of the minnows of the Des Moines River, Boone County, Iowa. PhD, Iowa State, 1948.

TARZWELL, Clarence M. Environmental imporvement in trout streams: a problem in applied ecology. PhD, Michigan, 1936.

ECOLOGY - Continued

WALLEN, Irvin E. The direct effect of turbidity on fishes. PhD, Michigan, 1950.

ZINN, Donald Joseph. An ecological study of the interstitial microfauna of some marine sandy beaches. PhD, Yale, 1942.

FAUNAS AND MANUALS

(See also CRUSTACEA, Carl; FOOD AND FOOD ORGANISMS, Bobb, Harden; HISTORICAL STUDIES, Rostlund; MISCELLANEOUS, Kilby; TAXONOMY, Silva)

ADDAIR, John. The fishes of the Kanawha river system in West Virginia and some factors which influence their distribution. PhD, Ohio, 1945.

BLACK, John David. The distribution of the fishes of Arkansas. PhD, Michigan, 1940.

CHAPMAN, Wilbert McL. Oceanic fishes from the northeastern Pacific ocean collected by the International Fisheries Commission. PhD, Washington, 1937.

GERKING, Shelby Delos. The distribution of the fishes of Indiana. PhD, Indiana, 1944.

GREENE, Carroll W. The distribution of Wisconsin fishes. PhD, Michigan, 1934.

JOHNSON, Raymond Earl. The distribution of Nebraska fishes. PhD, Michigan, 1942.

KELLEY, Tim K. The commercial fisheries of Washington. PhD, Washington, 1947.

MILLER, Robert Rush. The fishes of the relict waters of the Pleistocene Death Valley stream system. PhD, Michigan, 1945.

RANEY, Edward C. The distribution of the fishes of the Ohio drainage basin of western Pennsylvania. PhD, Cornell, 1939.

RICHARDSON, Laurence R. The fresh-water fishes of southeastern Quebec. PhD, McGill, 1935.

FISH POISONS

DAVIDSON, Ralph H. Field and laboratory studies of Derris as an insecticide. PhD, Ohio, 1935.

SMITH, Charles L. The causes underlying the rapid loss of toxicity of pyrethrum and derris insecticides after application and methods of retarding this decomposition. PhD, Rutgers, 1937.

TISCHLER, Nathaniel. Studies on how Derris kills insects. PhD, Rutgers, 1935

FOOD AND FOOD ORGANISMS

(See also CRUSTACEA, Hasler; LIFE HISTORY STUDIES, Britt; LIMNOLOGY, Gaufin, Jahoda)

BOBB, Marvin L. A contribution toward a knowledge of the aquatic and semi-aquatic Hemiptera of Virginia. PhD, Virginia, 1950.

CLEVELAND, Maurice M. Nutritive studies on white fish meals. PhD, Massachusetts, 1934.

CUMINGS, Harry W., Jr. A histological study of the effects of vitamin E deficiency on the guppy, Lebistes reticulatus. PhD, Illinois, 1941.

DONALDSON, Lauren R. Experimental studies in the nutrition of the Chinook salmon with special reference to histological changes in the pancreas. PhD, Washington, 1939.

DUNHAM, Donald West. Studies on the ecology and physiology of the fresh-water jellyfish, Craspedacusta sowerbii. PhD, Ohio, 1941.

EVANS, Gertrude. The relation between vitamins and the growth and survival of goldfishes in homotypically conditioned water. PhD, Chicago, 1936.

FROHNE, William C. Limnological relations of insects to certain emergent aquatic plants. PhD, Michigan, 1937.

HARDEN, Philip H. The stoneflies (Plecoptera) of Minnesota. PhD, Minnesota, 1950.

HUNT, Burton P. A study of the life history, ecology and economic importance of a burrowing mayfly, Hexagenia limbata (Serville), in certain Michigan waters. PhD, Michigan, 1950.

FOOD AND FOOD ORGANISMS - Continued

JOHNSON, Walter H. The food and feeding of the herring (Clupea harengus Linn.). PhD, Toronto, 1937.

KING, Robert H. An unidentified growth factor in condensed fish solubles. PhD, Purdue, 1949.

MCLAREN, Barbara A. The nutrition of rainbow trout. PhD, Wisconsin, 1947.

MONK, Cecil Ray. Marine harpacticoid copepods from California. PhD, California, Los Angeles, 1942.

NEILANDS, John B. Studies on (I) vitamin and amino acid content of fish and meat products (II) molybdenum toxicity in the rat (III) bound pantothenic acid. PhD, Wisconsin, 1949.

RICE, Nolan E. The nutrition of Flabellula mira Schaeffer. PhD, Duke, 1934.

SMITH, M. W. The fertilization of fresh water with an organic fertilizer. PhD, Toronto, 1934.

VELASQUEZ, Gregorio T. On the viability of Algae obtained from the digestive tract of the gizzard shad, Dorosoma cepedianum (Le Sueur). PhD, Michigan, 1939.

GAME FISH

(See also ECOLOGY, Bardach; LIFE HISTORY STUDIES, Eschmeyer, Royce; TAXONOMY, Mottley)

CARLANDER, Kenneth Dixon. The walleyes Strizostedion vitreum vitreum (Mitchill), of Lake of the Woods, with especial reference to the commercial fisheries. PhD, Minnesota, 1943.

GREENBERG, Bernard. Some relations between territory, social hierarchy, and leadership in the green sunfish. PhD, Chicago, 1947.

LANGLOIS, Thomas H. A study of the small-mouth bass Micropterus dolomieu Lacepede in rearing ponds in Ohio. PhD, Ohio, 1935.

MCCRIMMON, Hugh R. The survival of planted salmon (Salmo salar) in streams. PhD, Toronto, 1949.

SCOTT, Donald C. A study of a stream population of rock bass. PhD, Indiana, 1948.

GAME FISH - Continued

SIGLER, William F. The life history and management of the white bass Lepibema chrysops (Rafinesque), in Spirit Lake, Iowa. PhD, Iowa, 1947.

WILDER, Donald George. A comparative study of anadromous and fresh-water populations of the eastern speckled trout (Salvelinus fontinalis). PhD, Toronto, 1944.

HISTORICAL STUDIES

HEWES, Gordon W. Aboriginal use of fishery resources in Northwestern North America. PhD, California, 1947.

ROSTLUND, Erhard. A distribution study of fresh-water fish and fishing in aboriginal America north of Mexico. PhD, California, 1951.

HYDROLOGY
(See also ECOLOGY, Roelofs)

COBLENTZ, Jacob Michael. Some characteristics of bacteria from surface water supplies. PhD, Iowa State, 1942.

COLEMAN, Edward Abenheim. Interrelations of soil and water during infiltration. PhD, California, 1942.

DOBBINS, William Earl. Study of the effect of turbulence on sedimentation. PhD, Massachusetts Tech., 1942.

HICKOX, George H. Evaporation from a limited free water surface. PhD, California, 1940.

HSIA, Chen Huan. A study of transportation of fine sediments by flowing water. PhD, Iowa, 1944.

MCNOWN, John Stephenson. A study of fluid turbulence and sand transportation caused by the flow of water in an open channel. PhD, Minnesota, 1942.

TU, Yun Cheng. Transportation of sediment by flowing water. PhD, Iowa, 1934.

VANONI, Vito August. Experiments on the transportation of suspended sediment by water. PhD, California Tech., 1940.

LIFE HISTORY STUDIES

(See also CRUSTACEA, Clemens; ECOLOGY, Davies, Marshall; GAME FISH, Sigler; MORPHOLOGY, Caraway)

ANDREWS, Theodore F. The life history, distribution, growth, and abundance of Leptodora kindtii (Focke) in western Lake Erie. PhD, Ohio, 1948

APPLEGATE, Vernon C. Natural history of the sea lamprey, Petromyzon marinus, in Michigan. PhD, Michigan, 1950.

ARORA, Harbans L. An investigation of the California sand dab, Citharichthys sordidus (Girard). PhD, Stanford, 1949.

BRITT, Noah W. The life history and ecology of the white May fly, Ephoron album Say, in Lake Erie. PhD, Ohio, 1951.

BUCK, David H. Early limnological and fish population conditions of Canton Reservoir, Oklahoma, with special reference to the white crappie, black crappie, northern carp-sucker, buffalo, and white bass, and fishery management recommendations. PhD, Oklahoma A. and M., 1951.

CALHOUN, Alexander John. The biology of the black-spotted trout (Salmo clarkii henshawi Gill and Jordan) in two Sierra lakes. PhD, Stanford, 1943.

COOPER, Edwin L. Age and growth of brook trout, Salvelinus fontinalis (Mitchill), Michigan. PhD, Michigan, 1949.

CROSS, Frank B. Early limnological and fish population conditions of Canton Reservoir, Oklahoma, with special reference to carp, channel catfish, largemouth bass, green sunfish, and bluegill, and fishery management recommendations. PhD, Oklahoma A. and M., 1951.

DAIBER, Franklin C. The life history and ecology of the sheepshead, Aplodinotus grunniens Rafinesque, in western Lake Erie. PhD, Ohio, 1951.

DEASON, Hilary J. Morphometric and life history studies of the pike-perches, Stizostedion, of Lake Erie. PhD, Michigan, 1936.

DEFOLIART, Gene R. The life histories, identification and control of blackflies (Diptera: Simuliidae) in the Adirondack Mountains. PhD, Cornell, 1951.

DELACY, Allan Clark. Contributions to the life histories of two Alaska chars: Salvelinus malma (Walbaum) and Salvelinus alpinus (Linnaeus). PhD, Washington, 1942.

ESCHMEYER, Paul R. Reproduction and migration of the yellow pikeperch, Stizostedion vitreum vitreum, in Michigan. PhD, Michigan, 1949.

FAHY, William E. The life history of the northern greenside darter, Etheostoma blenniodes blennioides Rafinesque. PhD, Rochester, 1951.

FREY, David Grover. Growth and ecology of the carp, Cyprinus carpio, Linnaeus, in four lakes of the Madison region, Wisconsin. PhD, Wisconsin, 1940.

GOVINDAN, Pitchaimuthu. The age and growth of the Great Lakes cisco, Leucichthys artedi (Le Sueur) from Saginaw Bay, Green Bay, and Grand Traverse Bay. PhD, Michigan State, 1951.

HARRINGTON, Robert W., Jr. A contribution to the biology of bridled shiner, Notropis bifrenatus (Cope). PhD, Cornell, 1947.

HARTMEN, Willard D. The natural history of the marine sponges of southern New England. PhD, Yale, 1950.

JHINGRAN, Vishwa G. A contribution to the biology of the Klamath black dace, Rhinichthys osculus klamathensis (Evermann and Meek). PhD, Stanford, 1949.

JOBES, Frank Watkins. Age and growth of the yellow perch, Perca flavescens (Mitchill), in Lake Erie. PhD, Michigan, 1940.

JOHNSTON, Perry M. Early development of the largemouth black bass, Micropterus salmoides salmoides (Lacepede) and the history of the germ cells through the period of sex differentiation. PhD, Michigan, 1949.

KASK, John L. Studies in migration, fishing mortality, and growth in length of the Pacific halibut, Hippoglossus hippoglossus, from marking experiments. PhD, Washington, 1936.

KENNEDY, William Alexander. The whitefish, Coregonus clupeaformis (Mitchill) of Lake Opeongo, Algonquin Park, Ontario. PhD, Toronto, 1941.

KLEEREKOPER, Herman. The biology of the atherinid fish Odontesthes bonariensis (Valenciennes) in northeastern Rio Grande do Sul, Brazil. PhD, Michigan, 1950.

KOSTER, William J. The life-history and ecology of the sculpins (Cottidae) of central New York. PhD, Cornell, 1936.

KRUMHOLZ, Louis Augustus. The biology of the Western mosquitofish, Gambusia affinis affinis (Baird and Girard), in northern Illinois and southern Michigan. PhD, Michigan, 1945.

LACHNER, Ernest A. Studies of the biology of the chubs (genus Nocomis, family Cyprinidae) of Northeastern United States. PhD, Cornell, 1947.

LARIMORE, Richard W. Life history of the warmouth, Chaenobryttus coronarius (Bartram). PhD, Michigan, 1950.

MARCOTTE, Alexandre. Notes sur la biologie de l'eperlan de la province de Quebec. PhD, Laval, 1947.

MILLER, Richard G. The natural history of Lake Tahoe fishes. PhD, Stanford, 1951.

MORROW, James E., Jr. Life history of the long-horned sculpin, Myoxocephalus octodecimspinosus. PhD, Yale, 1949.

ODELL, Theodore T. The life history and ecological relationships of the alewife Pomolobus pseudoharengus Wilson in Seneca Lake, New York. PhD, Cornell, 1934.

ORCUTT, Harold G. Life history of the starry flounder, Platichthys stellatus (Pallas). PhD, Stanford, 1949.

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